**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**REGION 10**
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OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

July 24, 2009

Mr. Dean Moberg
Federal Highway Administration
711 South Capitol Way, Suite 501
Olympia, Washington 98501

Re: **SR 502 Corridor Widening Draft Environmental Impact Statement and Section 4(f) Evaluation (DEIS)**
**EPA Project Number: 08-033-FHW**

Dear Mr. Moberg:

The U.S. Environmental Protection Agency has reviewed the SR 502 Corridor Widening Draft Environmental Impact Statement and Draft Section 4(f) Evaluation (DEIS). We are submitting comments in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Thank you for the opportunity to provide comments at this time.

To improve safety and mobility, the proposed project, also referred to as the "SR 502/I-5 to Battle Ground – Add Lanes" project, would widen a little over 4 miles of SR 502 between NE 15th Avenue and NE 102nd Avenue from one travel lane in each direction to two lanes in each direction with a median barrier separating westbound and eastbound travel. Signals would be added at three intersections and the existing signalized intersection at NE 72nd Avenue would be improved and expanded. Paved shoulders, which could be used by pedestrians and bicyclists, would be constructed along the north and south side of SR 502, and sidewalks would be provided in the rural commercial area near Dollars Corner. Crosswalks would be installed at signalized intersections. The DEIS includes the No Action Alternative and one Build Alternative.

We are rating the DEIS as EC-2, Environmental Concerns, Insufficient information. An explanation of this rating is enclosed with this letter. Our key concerns are that:

- **The proposed project provides needed capacity, but should provide additional and/or expanded multi-modal solutions**, including public transit, Park and Ride facilities, non-motorized transportation infrastructure, and other Transportation Demand Management and Transportation System Management (TDM/TSM) strategies that would support State Growth Management Act and greenhouse gas reduction goals.
- **The proposed project contains a median barrier treatment** that would exacerbate habitat fragmentation in the project area, and result in unavoidable vehicular-wildlife collisions. We propose solutions to this safety dilemma in the enclosed detailed comments.

- **The proposed Sunset Oaks wetland mitigation site is hydrologically removed from the Mill Creek watershed.** We recommend that additional mitigation opportunities within the Mill Creek watershed be considered.

Thank you for the opportunity to offer comment on the Draft EIS and for your ongoing efforts to avoid, minimize, and mitigate project impacts. We would be pleased to collaborate with you further on this project. If you have questions or would like to discuss these comments, please contact Elaine Somers of my staff at (206) 553-2966 or at somers.elaine@epa.gov, or me at (206) 553-1601 or at reichgott.christine@epa.gov .

Sincerely,

/s/

Christine B. Reichgott, Manager
Environmental Review and Sediment Management Unit

Enclosures

**U.S. Environmental Protection Agency**
**SR 502 Corridor Widening Draft EIS**
**Detailed Comments**

**Need for multi-modal solutions, safety**

We appreciate that the Build (Pink) Alternative would provide a paved road shoulder where bicyclists and pedestrians would be allowed, that there would be crosswalks at the signalized intersections, and that one intersection, Dollars Corner, would have sidewalks and a marked bike lane. The DEIS refers to these provisions as Transportation Demand Management and Transportation System Management (TDM/TSM) components, yet they appear to be the minimum necessary to accommodate existing business-generated foot and bike traffic.

While the proposed project provides needed capacity, we believe it should provide for additional multi-modal solutions, including public transit, Park and Ride facilities, non-motorized transportation infrastructure, and other TDM/TSM strategies that would support State Growth Management Act and greenhouse gas reduction goals. We also have concerns about safety. The road shoulder allows for bike/pedestrian use, but it would also be accessible to and used by vehicles. Without separation from motorized traffic, bicyclists and pedestrians are vulnerable to potential accidents. The median barrier, which we discuss in more detail under ecological connectivity, also presents safety concerns.

Battle Ground has been and continues to be an area of rapid growth and development. It is easier and less expensive to install facilities, such as transit features, Park and Ride lots, and dedicated bike/pedestrian paths now rather than in the future when opportunities for land and right of way acquisition may be diminished.

*Recommendations:* Consider incorporating substantial new transit service (TDM/TSM Option 2), both local and express routes, to provide an alternative to privately owned vehicle (POV) use. Also, consider providing:

- Park and Ride facilities;
- a dedicated pedestrian/bikeway that is separated from motorized traffic; and
- synchronized traffic signals.

**Ecological connectivity**

We are pleased that the proposed project would maximize the use of existing infrastructure by expanding upon the current right of way. We are concerned, however, about the project design, which for safety and access control purposes, would include a median barrier treatment (jersey barrier) to separate east and westbound traffic. Except at U-turn locations and signalized intersections, the median would present a continuous barrier to wildlife or other animals attempting to cross the roadway.

With respect to safety, the median barrier would help prevent head-on vehicular collisions, but it would also pose a serious safety issue for people and animals by causing unavoidable vehicular-wildlife collisions. Substantial property damage, injuries, and fatalities

often result from such collisions. From an ecological point of view, a widened roadway together with a median barrier would exacerbate habitat fragmentation in the project area, such that the current potential for safely crossing the roadway would be greatly reduced or eliminated. This would negatively affect the ability to maintain species, populations, genetic diversity, and other natural ecological processes. These impacts could be avoided or minimized by modifying the project design and by providing wildlife crossing structures.

*Recommendations:* Incorporate design modifications that would increase the permeability of the roadway for wildlife movement and still meet safety needs. We recommend adopting one or more of the following:

- Install wildlife crossing structures at strategic locations and in consultation with Washington Department of Fish and Wildlife (WDFW) and US Fish & Wildlife Service (USFWS). Stream crossings, riparian areas, and wetland locations are often the most heavily used wildlife movement corridors. It would be feasible and efficient to install wildlife crossings where hydrological connectivity structures, such as large box culverts, bridges, and/or oversized culverts, are already planned. For example, the Build Alternative would replace three existing Mill Creek culverts under SR 502 and extension or replacement of Mill Creek North culvert (DEIS p. 4-12). Moderate adjustments in size (width and height) could be made to accommodate movement of terrestrial species.
- Install an intermittent barrier, i.e., barrier with gaps that create, in effect, a dashed line rather than a solid line down the middle of the roadway.
- Together with wildlife undercrossings, expand the right of way to include a wider vegetated median that would eliminate the median barrier and that could, now or in the future, have the potential to serve as an HOV, transit, or other special use lane.

**Wetland mitigation**

We support the proposed Mill Creek North mitigation site in that it is located within the project area and would provide benefits to the Mill Creek watershed. However, due to its location, the proposed Sunset Oaks wetland mitigation site is less suitable to compensate for project-related impacts. The DEIS does not provide a rationale for considering a mitigation site that is hydrologically removed from the Mill Creek watershed. We believe there are both need and opportunity for restoration and/or enhancement projects within the headwaters of Mill Creek.

*Recommendations:*

- Please consider additional mitigation opportunities within the Mill Creek watershed. We suggest that even a combination of small but strategically placed mitigation projects, such as, a "string of pearls" concept along Mill Creek, would provide greater ecological benefit than a large off-site proposal.
- Provide a rationale that explains the potential selection of the Sunset Oaks wetland mitigation site.

**Stormwater**

We are pleased that WSDOT would be treating up to 90% of the runoff from the current and new surfaces. The proposal to have water quality detention that is localized or adjacent to the highway could indirectly benefit wetlands, wet prairies, and other habitats because it would contribute to or maintain the local hydrology and recharge of the water table that sustains these systems. In addition to providing groundwater recharge, localized detention could provide base flow to the Mill Creek system during the drier months.

*Recommendation*: Provide localized stormwater detention rather than removing surface water runoff from the system.

We are concerned about the need for maintenance of the stormwater and water quality treatment facilities. While we expect that stormwater facilities maintenance is part of WSDOT's program, there should be an explanation of the nature and frequency of expected maintenance activities for these facilities.

*Recommendation*: Include in the Final EIS information regarding the nature and frequency of stormwater facilities maintenance.

**Threatened and endangered species**

The DEIS indicates (p. 5-4 , 5-5) that pile driving with noise that could reach 101 decibels may occur in the location of Mill Creek North, and that there would be fish impacts with potential dewatering, channel realignment/restoration, wetland mitigation activities, disturbance of 2 to 3 acres of land below the OHWM due to fill placement for road slopes, culvert replacement/extension, increased impervious surface, increased total and dissolved metals in stormwater, potential sedimentation from clearing and grubbing, and potential for fish handling from in water work, which could result in mortality. The conclusions of the Biological Assessments are that the project would be likely to adversely affect ESA-listed steelhead, coho, and Chinook salmon and the designated critical habitat for steelhead. The Final EIS should provide more specific information about the nature and severity of these impacts and about how they would be effectively mitigated in accordance with the Biological Opinion.

*Recommendations*:

- Include in the Final EIS the results of the Biological Opinion and the reasonable and prudent measures that would avoid or minimize impacts to ESA-listed fish and critical fish habitat that would be implemented. We particularly request that this information include the measures to address pile driving impacts, as well as indirect and cumulative effects from stimulated travel and land use change.
- Visit the EPA Region 3 *Green Highways* website at www.greenhighways.org for more ways to avoid and minimize environmental impacts.

**Air quality/air toxics**

The DEIS, p. 4-44, does not discuss project related air toxics and diesel emissions that would potentially increase as a result of the proposed project, but rather refers to EPA regulations that will decrease mobile source air toxics (MSATs) in the future. There is also no identification of the sensitive receptors (such as, schools, outdoor recreation areas, hospitals,

senior and day care facilities, etc.) to near roadway air pollutants in the project corridor. No construction mitigation measures other than dust control are proposed. These issues are of concern because air toxics emissions, particularly diesel exhaust, are known or suspected to cause cancer or other serious health effects, such as respiratory, neurological, reproductive, and developmental effects.

There are now many opportunities, several of which are inexpensive and easy to implement, to reduce the effects of project construction. Please see the Clean Construction USA website at http://www.epa.gov/otaq/diesel/construction/ . At this website are examples of construction mitigation measures not included in the DEIS. The website also includes case studies and examples of institutional arrangements for implementing this mitigation.

*Recommendations:*

- Provide an analysis of project related air quality impacts in the Final EIS that distinguishes between project induced emission changes vs. changes caused by fleet turnover and more stringent new vehicle emission standards.
- Identify sensitive receptor locations and populations for both project construction and operation.
- Augment the construction mitigation measures listed in the Draft EIS to include additional mitigation measures listed on the above website, and commit to their implementation.

**Indirect and cumulative effects -- stimulated travel and growth**

We are concerned that the proposed project, as currently designed for POV use, could result in stimulated travel and growth, and related effects. Based on existing research on stimulated travel (Hansen et al, 1993; Goodwin, 1996; TRB, 1995) it is reasonable to expect:

- an increase in vehicle miles traveled (VMT);
- an increase in the number and length of trips;
- an absorption of all new capacity within about five years of the change in road supply;
- an increase in the rate of growth due to travel time savings from increased road capacity.

Based on the above, we may also see:

- an increase in fuel consumption and GHG emissions once the new capacity is absorbed and traffic becomes congested;
- an increase in the number and severity of vehicle collisions, due to increased traffic volume and speed;
- an increase in dispersed development outside the UGA; and
- increased auto dependency, auto-oriented development, and demand for more capacity.

The DEIS makes several projections and draws conclusions concerning the growth rates of vehicle miles traveled (VMT), fuel consumption, growth and development that appear to be inconsistent (DEIS pp. 3-3, 6-2, 6-6, 6-7, Section 4(f) Evaluation, p. 47, Appendix L, Indirect and Cumulative Effects Analysis, p. 15).

*Recommendations:* The EIS would benefit from some consolidation and clarification of these statements where they do not coincide, and where there are gaps in information and

analysis needed to predict outcomes. Once the County's legal appeal is decided, the analysis should be updated to reflect any potential adjustments in the UGA boundaries and potential for stimulated travel and growth.

**Invasive species**

Vegetation removal and soil disturbance from project construction would enable invasive weeds to become established. The EIS should identify management actions that would be taken to comply with Executive Order 13112 on Invasive Species.

*Recommendation:* Provide analysis and disclosure in the Final EIS regarding the location and extent of project-related site disturbance, habitats that would be especially vulnerable to and negatively impacted by weed invasion, and measures to prevent and control outbreaks of invasives.